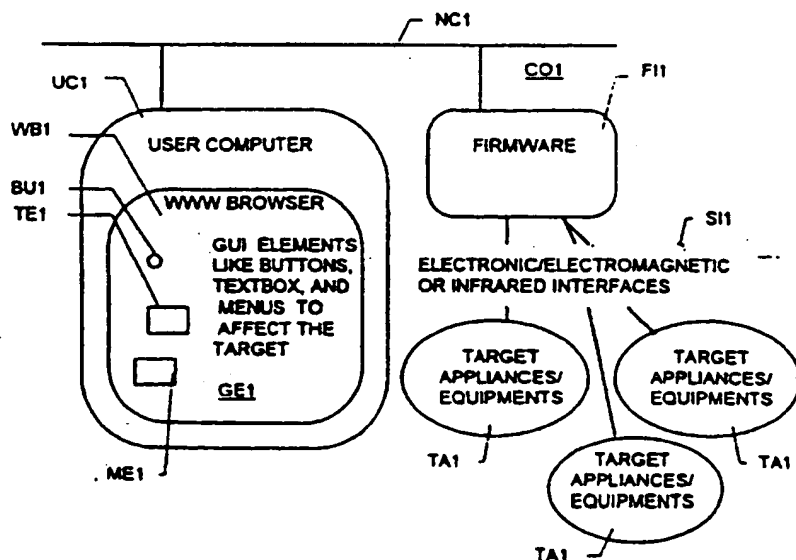




INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(51) International Patent Classification ⁶ : G06F 9/24, 13/10, 15/16		A3	(11) International Publication Number: WO 97/18636
			(43) International Publication Date: 22 May 1997 (22.05.97)
(21) International Application Number: PCT/IB96/01435 (22) International Filing Date: 13 November 1996 (13.11.96) (30) Priority Data: 08/558,142 13 November 1995 (13.11.95) US 60/006,557 13 November 1995 (13.11.95) US (71) Applicant (for all designated States except US): WEBTRONICS, INC. [US/US]; 160 Beaver Street, San Francisco, CA 94114 (US). (72) Inventor; and (75) Inventor/Applicant (for US only): MIZUNO, Yoshiro [JP/JP]; 4-1-24, Yushima Bunkyo-ku, Tokyo 113 (JP). (74) Agent: STANGER, Leo; 382 Springfield Avenue, Summit, NJ 07901 (US).		(81) Designated States: AM, AT, AU, BB, BG, BR, BY, CA, CH, CN, CZ, DE, DK, EE, ES, FI, GB, GE, HU, IS, JP, KE, KG, KP, KR, KZ, LK, LR, LT, LU, LV, MD, MG, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, TJ, TM, TT, UA, UG, US, UZ, VN, ARIPO patent (KE, LS, MW, SD, SZ, UG), European patent (AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG). Published With international search report. Before the expiration of the time limit for amending the claims and to be republished in the event of the receipt of amendments. (88) Date of publication of the international search report: 3 July 1997 (03.07.97)	

(54) Title: CONTROL OF REMOTE DEVICES USING HTTP PROTOCOL



(57) Abstract

Control of remote devices is achieved by having httpd (Web server) on a dedicated firmware device. A firmware device (CO1, FI1) with a httpd (Web server) programmed into its memory takes commands from a remote http client (Web client) (UC1, WB1). The firmware sends interface information to the target device (TA1) with electronic, electromagnetic, or infrared signals (SI1) to control the target device. The firmware may be integrated into an IC chip so product makers can have the same remote control capability within their product.

INTERNATIONAL SEARCH REPORT

International application No.
PCT/IB96/01435

A. CLASSIFICATION OF SUBJECT MATTER

IPC(6) : G06F 9/24, 13/10, 15/16
US CL : 395/200.11, 200.12; 379/105; 340/825.07

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

U.S. : 455/4.1, 151.2, 353; 395/200.09, 200.11, 200.12; 379/74, 102, 105; 359/142, 143, 144, 145, 146; 348/734;
340/825.06, 825.07, 825.08, 825.24, 825.25, 825.69, 825.72Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched
NONE

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

USPTO APS, WWW using ALTAVISTA

search terms: remote control/operation, WWW, Ethernet, internet, lan, network, browser, gui, HTTP, HTTPD,
server, client, homenet, homebus, HTML, wireless, infrared

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A,P	US 5,572,643 A (JUDSON) 05 November 1996 Abstract; Fig. 1-8; col. 1, lines 13-55; col. 3, line 44 - col. 6, line 12; col. 7, line 60 - col. 8, line 21	1
A,P	US 5,570,085 A (BERTSCH) 29 October 1996 Abstract; Fig. 1-2; col. 5, line 36 - col. 6, line 64	1
A	US 5,467,264 A (RAUCH et al.) 14 November 1995 Abstract; Fig. 1-2; col. 4, lines 6-61	1
X	US 5,452,291 A (EISENHANDLER et al.) 19 September 1995 Abstract; Fig. 1-5; col. 3, lines 37-52; col. 4, line 30 - col. 5, line 66; col. 16, lines 36-43	1

☒ Further documents are listed in the continuation of Box C. ☐ See patent family annex.

Special categories of cited documents:	
A documents defining the general state of the art which is not considered to be of particular relevance	*T* later document published after the international filing date or priority date and not in conflict with the application but cited to understate the principle or theory underlying the invention
E earlier document published on or after the international filing date	*X* document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
L documents which may throw doubt on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)	*Y* document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art
O documents referring to an oral disclosure, use, exhibition or other means	*A* document member of the same patent family
P document published prior to the international filing date but later than the priority date claimed	

Date of the actual completion of the international search

11 APRIL 1997

Date of mailing of the international search report

23 MAY 1997

Name and mailing address of the ISA/US
Commissioner of Patents and Trademarks
Box PCT
Washington, D.C. 20231

Facsimile No. (703) 305-3230

Authorized official
MARK H. RINEHART

Telephone No. (703) 305-9600

INTERNATIONAL SEARCH REPORT

 International application No.
 PCT/IB96/01435

C (Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT		
Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	US 5,450,359 A (SHARMA et al.) 12 September 1995 Abstract; Fig. 1-2; col. 2, line 47 - col. 3, line 25	1
X	US 5,109,222 A (WELTY) 28 April 1992 Abstract; Fig. 5; col. 3, lines 14-60; col. 7, line 24 - col. 8, line 19	1
X	US 5,086,385 A (LAUNEY et al.) 04 February 1992 Abstract; Fig. 1; col. 7, lines 38-68; col. 9, lines 54-64	1
X	US 5,051,720 A (KITIRUTSUNETORN) 24 September 1991 Abstract; Fig. 1; col. 3, lines 21-68; col. 4, lines 50-54	1
X	US 4,904,993 A (SATO) 27 February 1990 Abstract; Figure; col. 3, lines 27-37	1
X	US 4,882,747 A (WILLIAMS) 21 November 1989 Abstract; Fig. 2-3A; col. 3, lines 58-64; col. 4, line 8 - col. 6, line 19	1
X	STAC Product Brochure: Reachout Remote Control Professional Edition Network Version December 1994 entire document	1
X	COX M. Submit an Observing Request http://www.telescope.org/rti/login/addjob.doit 21 March 1995 entire document	1
X	COX M. Submit a telescope Job: Pick an Object http://www.telescope.org/rti/login/staname.html 10 April 1995 entire document	1
X	GOLDBERG K. et al. Mercury Project Robotic Tell-Excavation http://www.usc.edu/dept/raiders/ 12 June 1995 entire document	1
X	GOLDBERG K. et al. USC Mercury Project: Interface http://www.usc.edu/dept/raiders/interface.html 12 June 1995 entire document	1

THIS PAGE BLANK (USPTO)